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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,402	12/28/2001	Hitoshi Matsumoto	VX012397 PCT	3876
21369	7590	06/04/2007		
POSZ LAW GROUP, PLC 12040 SOUTH LAKES DR. SUITE 101 RESTON, VA 20191			EXAMINER JAGOE, DONNA A	
			ART UNIT 1614	PAPER NUMBER
			MAIL DATE 06/04/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/019,402

Applicant(s)

MATSUMOTO ET AL.

Examiner

Donna Jagoe

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-30,32-40 and 42-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-30,32-40 and 42-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 18, 2007 has been entered.

Applicants' arguments filed September 29 2006 have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

Claims 27-30, 32-40 and 42-49 are pending in this application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 27-30, 32-40 and 42-49 are rejected under 35 U.S.C. 103(a) as obvious over Nakhmedov et al. (Konservnaya I Ovoshchesushil'naya Promyshlennost) in view of Lawhon et al. U.S. 4,643,902 and Laboratoires Chibret, GB 1,007,751.

Nakhmedov et al. teach, in Table 1, a black currant composition comprising 6256.8 ± 11.5 mg/100g and 6128.9 ± 15.2 mg/100g of anthocyanin¹ (about 6.26% which is encompassed by the claimed about of 5 to 25% of black currant anthocyanin). It meets the claim because there is no monosaccharide contained therein and there is no

¹ $6.2568 \text{ g/100g} \times 100\% = 6.257\%$

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organic acid mentioned. The claim is drawn to not more than 5% organic acid. This amount encompasses the 0% organic acid of Nakhmedov et al. Regarding claims drawn to delphinidin and delphinidin-3-o-rutinoside, it is known that delphinidin and delphinidin 3-rutinoside is contained in the anthocyanin of black currant fruit as recited by Nakhmedov et al. (see page 7 of the translation). Regarding the range of amounts of the components of anthocyanin, these amounts are constant and would be present in black currant anthocyanin. Lawhon et al. teach purifying and concentrating juice such as currant juice through by reverse osmosis and optionally by ion exchange resin. It teaches currants. It would have been obvious to substitute black currant juice instead of currant juice since Lawhon et al. teach the reverse osmosis and ion-exchange to be employed for currant juice. It is prima facie obvious to substitute equivalents motivated by the reasonable expectation that the respective species will behave in a comparable manner or give comparable results in comparable circumstances. *In re Ruff* 118 USPQ 343; *In re Jezel* 158 USPQ 99; the express suggestion to substitute one equivalent for another need not be present to render the substitution obvious. *In re Font*, 213 USPQ 532. Since the process is applicable to currants one of ordinary skill in the art would have been motivated to employ the method of extracting the juice from black currants by reverse osmosis and/or ion-exchange resin since Lawhon et al. teach it to be useful to produce juice from currants. Regarding claims 30, 32, 33 and 34, drawn to a product by process, "The patentability of a product does not depend upon its method of production. If the product in a product-by-process claim is the same as or obvious from a product of the prior art, then the claim is unpatentable even though the prior art

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product was made by a different process.” In re Thorpe, 227 USPQ 964, 966 (Fed. Cir. 1985) (citations omitted). Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to the applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. In re Marosi, 218 USPQ 289, 292 (Fed. Cir. 1983). Claims 35-36 are drawn to a food composition. There is no general rule as to the weight given a preamble as a positive limitation affecting the patentability of the claimed subject matter. See In re Sneed, 710 F.2d 1544, 1548, 218 USPQ 385, 388 (Fed Cir. 1983), In re Neugebauer et al, (CCPA 1964) 330 F2d 353, 141 USPQ 205, In re Duva, (CCPA 1967) 387 F2d 402, 156 USPQ 90, and especially Integra LifeSciences I Ltd. V. Merck KgaA, (DC Scalif) 50 USPQ2d 1846. The “food or drink” of the claims is interpreted as intended use. The intended use must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. Since the marcs of the Nakhmedov et al and the fruit juice of Lawhon et al. are capable of performing the intended use of being consumed, then it meets the claim. Regarding claims 37-40 drawn to improvements in blood fluidity, blood pressure and various visual functions, the intended use of the claimed composition does not patentably distinguish the composition, per se, since such undisclosed use is inherent in the reference composition. In order to be limiting, the intended use must create a structural difference between the claimed composition and the prior art composition. In the instant case, the intended use does not create a structural

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difference, thus the intended use is not limiting. However, Laboratoires Chibret teach that anthocyanin glucosides such as those obtained from bilberries are useful for visual acuity enhancing night vision (column 1, lines 20-25). It would have been obvious to employ black currant anthocyanin for vision problems such as visual acuity and night vision. Motivation to employ black currants would come from the knowledge that Laboratoires Chibret teach anthocyanins such as those obtained from bilberries to be useful for such a purpose. It is prima facie obvious to substitute equivalents, motivated by the reasonable expectation that the respective species will behave in a comparable manner or give comparable results in comparable circumstances. *In re Ruff* 118 USPQ 343; *In re Jezei* 158 USPQ 99; the express suggestion to substitute one equivalent for another need not be present to render the substitution obvious. *In re Font*, 213 USPQ 532. Since both bilberries and black currants contain anthocyanin, it would have been obvious to employ black currants to improve vision since Laboratoires Chibret teach anthocyanin containing vegetable extracts of fruit juices to be useful for such a purpose.

Claim 42 is drawn to a black currant anthocyanin containing food composition which comprises 5-25% black currant anthocyanin and not more than 5% by weight organic acid content. Nakhmedov et al. teach, in Table 1, a black currant composition comprising 6256.8 ± 11.5 mg/100g and 6128.9 ± 15.2 mg/100g of anthocyanin (about 6.26% which is encompassed by the claimed about of 5 to 25% of black currant anthocyanin). It meets the claim because there is no organic acid mentioned. The claim is drawn to not more than 5% organic acid. This amount encompasses the 0% organic acid of Nakhmedov et al. Regarding claim 43 drawn to a range of the

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delphinidin and delphinidin-3-o-rutinoside, it is known that delphinidin and delphinidin 3-rutinoside is contained in the anthocyanin of black currant fruit as recited by Nakhmedov et al. (see page 7 of the translation). The amounts of the components of black currant are constant and would be present. as noted in *In re Best* (195 USPQ 430 (CCPA 1977)), and *In re Fitzgerald* (205 USPQ 594 (CCPA 1980)), the mere recitation of newly-discovered function or property, inherently possessed by things in prior art, does not cause claims drawn to those things to distinguish over prior art. Claim 44, drawn to a black currant anthocyanin containing food composition prepared by purifying, separating and concentrating the black currant anthocyanin in a retentate with a negatively charged reverse osmosis membrane from raw material. Lawhon et al. teach purifying and concentrating juice such as currant juice through by reverse osmosis and optionally by ion exchange resin. It teaches currants. It would have been obvious to substitute black currant juice instead of currant juice since Lawhon et al. teach the reverse osmosis and ion-exchange to be employed for currant juice. It is prima facie obvious to substitute equivalents motivated by the reasonable expectation that the respective species will behave in a comparable manner or give comparable results in comparable circumstances. *In re Ruff* 118 USPQ 343; *In re Jezel* 158 USPQ 99; the express suggestion to substitute one equivalent for another need not be present to render the substitution obvious. *In re Font*, 213 USPQ 532. Since the process is applicable to currants one of ordinary skill in the art would have been motivated to employ the method of extracting the juice from black currants by reverse osmosis and/or ion-exchange resin since Lawhon et al. teach it to be useful to produce juice from

currants. Dependent claim 45 limits the composition to one that is free of monosaccharide. Nakhmedov et al. teach, in Table 1, a black currant composition comprising 6256.8 ± 11.5 mg/100g and 6128.9 ± 15.2 mg/100g of anthocyanin (about 6.26% which is encompassed by the claimed about of 5 to 25% of black currant anthocyanin). It meets the claim because there is no monosaccharide contained therein. Regarding claim 46, the monosaccharide free concentrated solution comprising 5-25% black currant anthocyanin and not more than 5% organic acid is obvious over the marcs in solution of Nakhmedov. See the rejection above.

Claim 47 is drawn to a monosaccharide free black currant anthocyanin concentrated solution suitable for human consumption, comprising on the basis of solid matters, 2.5-12.5% delphinidin and 2-10% delphinidin-3-o-rutinoside. Since these amounts are derived from black currant anthocyanin of Nakhmedov, they would be necessarily present in the marcs. As noted in *In re Best* (195 USPQ 430 (CCPA 1977)), and *In re Fitzgerald* (205 USPQ 594 (CCPA 1980)), the mere recitation of newly-discovered function or property, inherently possessed by things in prior art, does not cause claims drawn to those things to distinguish over prior art. Regarding the product by process claim 48, "The patentability of a product does not depend upon its method of production. If the product in [a] product-by-process claim is the same as or obvious from a product of the prior art, [then] the claim is unpatentable even though the prior [art] product was made by a different process." *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985) (citations omitted). Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although

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produced by a different process, the burden shifts to the applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. In re Marosi, 218 USPQ 289, 292 (Fed. Cir. 1983). The composition is obvious over the combined teachings of Nakhmedov et al. and Lawhon et al. as noted above. Claim 49 is drawn to a black currant anthocyanin containing monosaccharide free concentrated solution processed into a paste, gel or powder. The composition of Nakhmedov et al. remaining after pressing the marcs in table 1 appears to be a paste.

Thus the claims fail to patentably distinguish over the state of the art as represented by the cited references.

Accordingly, for the above reasons, the claims are deemed properly rejected and none are allowed.

Response to Arguments

Applicant asserts that table 3 shows an acidity of 9.85 and sugar content of 16.1%. The rejection is based on the composition of table 1. However, regarding the assertion of the sugar content, the instant claims are drawn to a "monosaccharide free composition. Sugars can be monosaccharides, disaccharides and complex carbohydrates. Absent evidence to the contrary, Nakhmedov et al. teach a sugar, not a monosaccharide.

Regarding applicants' assertion that Nakhmedov does not disclose or suggest a composition which comprises 5 to 25% by weight of black currant anthocyanin, Nakmedov refers to "Marcs", the residue remaining after the fruit has been pressed. Although applicant refers to this as "waste", the marcs of Nakmedov meets the

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limitations of the claim. Regarding Lawhon, applicant states that the instant invention organic acid content can be reduced without the use of an ion exchange column. If the product in a product-by-process claim is the same as or obvious from a product of the prior art, then the claim is unpatentable even though the prior art product was made by a different process." In response to applicant's argument that there is no suggestion to combine the references, In this case, the references identify the common problem of concentrating fruit juice and since one reference gives specific example of single critical parameter, the amount of solids left, and the amount of delphinidin in the composition and provides explicit guidance tying that parameter to key parameters of the second reference, concentrating the fruit juice with a reverse osmosis process motivated by the desire to retain flavor and antioxidants in the juice/food. It is therefore reasonable to conclude that the strength of correlation between references gives rise to reasonable expectation of success from combining them. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references.

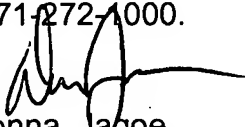
Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donna Jagoe whose telephone number is (571) 272-0576. The examiner can normally be reached on Monday through Thursday from 9:00 A.M. - 3:00 P.M..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on (571) 272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Donna Jagoe
Patent Examiner
Art Unit 1614

May 26, 2007



ARDIN H. MARSCHEL
SUPERVISORY PATENT EXAMINER